



## *EPA's Environmental Technology Verification Program for Homeland Security*



### **ETV** Centers

**ETV Advanced  
Monitoring Systems  
Center - Battelle**

**ETV Air Pollution  
Control Technology  
Center - Research  
Triangle Institute**

**ETV Drinking Water  
Systems Center -  
NSF International**

**ETV Water Quality  
Protection Center -  
NSF International**

**ETV Building  
Decontamination  
Technology Center -  
Battelle**

### ***ETV Takes on Important Role in Homeland Security Technology Verifications***

As everyone is aware, the events of September 11, 2001 have placed homeland security at the forefront of our nation's priorities. The U.S. Environmental Protection Agency (EPA) is now engaged in identifying and filling data and information gaps with our sister agencies and departments, including the new Department of Homeland Security. As part of EPA's effort, our Environmental Technology Verification Program (ETV) has been tapped to verify the performance of three classes of technologies: (1) to monitor and ensure the quality of the nation's drinking water systems and supplies, (2) to monitor indoor environments in buildings, and (3) to clean up contamination from intentional attacks.

#### ***Water Security***

The Office of Research and Development's (ORD) National Homeland Security Research Center (NHSRC) and the Office of Water (OW) are working collaboratively on technology verification to support the needs of the nation's drinking water supply system operators. Under a funding agreement with OW, two ETV technology verification organizations were funded to develop protocols and test technologies for ensuring the safety and security of the nation's drinking water systems and supplies. Battelle Memorial Institute, which manages the ETV Advanced Monitoring Systems Center, has been funded to develop protocols and test technologies for the detection of chemical and biological warfare agents that may be introduced into drinking water. NSF International, which manages the ETV Drinking Water Systems and the Water Quality Protection Centers, has been funded to develop protocols and test technologies for point-of-use treatment of biological and chemical contaminants, and for technologies for treating wastewater resulting from the decontamination of buildings.

#### ***Safe Buildings***

In addition to its Water Security Program, the NHSRC Safe Buildings Program has called upon ETV to conduct tests and develop protocols for technologies used in monitoring, measuring, detecting, and decontaminating chemical and biological warfare agents introduced into buildings and other structures. Public- and private-sector buildings that house the nation's workforce may be targets of future terrorist attacks, as they represent locations where hundreds or thousands of people congregate during a

## ETV Center Managers

### ETV Advanced Monitoring Systems Center

Robert Fuerst, EPA,  
919-541-2220  
Karen Riggs, Battelle,  
614-424-7379

### ETV Air Pollution Control Technology Center

Ted Brna, EPA,  
919-541-2683  
Jack Farmer, RTI,  
919-541-6909

### ETV Drinking Water Systems Center

Jeff Adams, EPA,  
513-569-7835  
Bruce Bartley, NSF  
International,  
734-769-5148

### ETV Water Quality Protection Center

Ray Frederick, EPA,  
732-321-6627  
Thomas Stevens, NSF  
International,  
734-769-5347

### ETV Building Decontamination Technology Center

John Chang, EPA,  
919-541-3747  
Karen Riggs, Battelle,  
614-424-7379

### ETV Homeland Security Coordinator

Eric Koglin, EPA,  
702-798-2332

### Web Site

<http://www.epa.gov/etv>

typical work day. In addition to buildings, there is a need to protect transient populations that use facilities such as stadiums and transportation hubs. In fiscal year 2002, ORD provided the start-up funding to begin initial verification efforts with two ETV technology verification organizations. Research Triangle Institute, which manages the ETV Air Pollution Control Technology Center, will focus on developing protocols and testing technologies used for cleaning building ventilation air. Because of its demonstrated expertise in testing and evaluating monitoring technologies, Battelle will focus on developing protocols and testing technologies used for monitoring, measuring and detecting contaminants in indoor air and on surfaces. Battelle will test and evaluate the performance of technologies used to decontaminate the interior and exterior of buildings.

### *Participation of Stakeholders and Technical Experts*

Each of the ETV technology verification organizations works closely with stakeholder groups to ensure that the most up-to-date information and expertise are used in verification efforts. The stakeholders include representatives from a myriad of user communities, as well as technical experts whose skills can be brought to bear on developing the verification design and evaluating performance data.

### *Schedule*

The technology verification organizations are charged with implementing “rapid” verification. The goal is to complete verification in four-to-six months from the time the vendors agree to participate. Completing the process culminates in an Environmental Technology Verification Report and a signed Verification Statement for each participating technology.

